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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/754,412	01/09/2004	Vince Winstead	203-1174 (FGT 3C9)	7946
36865	7590	07/26/2004	EXAMINER	
KOLISCH HARTWELL, PC 200 PACIFIC BUILDING 520 SW YAMHILL STREET PORTLAND, OR 97204			ESHETE, ZELALEM	
			ART UNIT	PAPER NUMBER
			3748	

DATE MAILED: 07/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/754,412

Applicant(s)

WINSTEAD ET AL.

Examiner

Zelalem Eshete

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 13-22 is/are rejected.
- 7) ☒ Claim(s) 8-12 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 04/02/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,3,4,13-15,17,18,20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Janse (5,826,551).

Regarding claims 1,15,20: Janse discloses a system comprising: an electrically actuated valve of an internal combustion engine (see figure 1; column 1, lines 5 to 15); computer storage medium having instructions encoded therein for controlling electrically actuated valve (see numeral 13), said medium comprising: code for determining a desired valve condition (opening and closing timing) for cylinder cycle (see abstract), code for determining an actual valve condition (opening and closing timing) occurring during said cylinder cycle (see column 4, lines 5 to 25), code for determining an error between said desired valve condition and said actual valve condition (opening and closing errors) for said cylinder cycle (see column 5, lines 42 to 48); and code for storing said determined error in keep alive memory (see numerals 13,18; column 5, lines 32 to 48), code for adjusting a desired valve condition (opening and closing timing) of a subsequent cylinder cycle based on said determined error (see column 5, lines 32 to 40; column 7, lines 19,20; column 8, lines 1,2).

Regarding claims 3,4,17,18,21,22: Janse discloses code for triggering said determination of said error (opening/closing) during preselected conditions and said triggering code conditions include whether said determined error is greater than a threshold (see column 5, lines 40 to 48, column 7, lines 19,20; column 8, lines 1,2).

Regarding claims 13,14: Janse discloses code for storing the error as a function of time since engine start and as a function of a number of engine events from a start of the engine (see column 5, lines 32 to 48).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2,16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Janse in view of Jankovic (6,488,008).

Janse discloses the claimed invention as recited above; however, fails to disclose filtering the determined error.

However, Jankovic teaches filtering the determined error (see numeral 72).

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Janse's system by providing an error filtering means as taught by Jankovic in order to enhance the information quality of the system.

5. Claims 5,7,19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Janse in view of Tang (5,345,914).

Janse discloses the claimed invention as recited above; however, fails to disclose the threshold varies as a function of engine operating conditions and as a function of engine speed.

However, Tang teaches the error threshold varies as a function of engine operating conditions (see column 12, lines 20 to 23). Tang further teaches the engine speed is known engine parameter (see column 3, lines 40 to 45).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Janse's system by providing a varying threshold as a function of engine operating conditions (which also include engine speed) as taught by Tang in order adapt the system to various engine operating conditions.

Regarding claim 6: Janse disclose the desired valve condition is desired valve timing (see abstract).

Allowable Subject Matter

6. Claims 8-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zelalem Eshete whose telephone number is (703) 306-4239. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (703) 308-2623. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Zelalem Eshete
Examiner
Art Unit 3748

Z

Thomas Denion
THOMAS DENION
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700